09/437,667

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                 "Ask CAS" for self-help around the clock
NEWS
     3
        FEB 27
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         JUN 02
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                 and display fields
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         JUN 28
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        JUL 11
                 CHEMSAFE reloaded and enhanced
NEWS 13
        JUl 14
                 FSTA enhanced with Japanese patents
NEWS 14 JUL 19
                 Coverage of Research Disclosure reinstated in DWPI
NEWS 15 AUG 09
                INSPEC enhanced with 1898-1968 archive
NEWS 16 AUG 28 ADISCTI Reloaded and Enhanced
NEWS 17
         AUG 30
                 CA(SM)/CAplus(SM) Austrian patent law changes
NEWS 18
        SEP 11
                 CA/CAplus enhanced with more pre-1907 records
NEWS 19
         SEP 21
                 CA/CAplus fields enhanced with simultaneous left and right
                 truncation
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              AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.
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              For general information regarding STN implementation of IPC 8
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED
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=> s (Mn or manganese) and soil and (hyperaccumulat? or phytoremediat? or
phytoextract?)
  16 FILES SEARCHED...
  41 FILES SEARCHED...
           790 (MN OR MANGANESE) AND SOIL AND (HYPERACCUMULAT? OR PHYTOREMEDIAT
               ? OR PHYTOEXTRACT?)
=> s l1 not PY>1995
   9 FILES SEARCHED...
  10 FILES SEARCHED...
  26 FILES SEARCHED...
'1995' NOT A VALID FIELD CODE
  30 FILES SEARCHED...
'1995' NOT A VALID FIELD CODE
 42 FILES SEARCHED...
            20 L1 NOT PY>1995
=> s (Mn or Ni or Co or cobalt or nickel or manganese) and soil (3a) pH and
(phytoremediat? or phytoextract? or hyperaccumulat?)
  16 FILES SEARCHED...
  30 FILES SEARCHED...
           163 (MN OR NI OR CO OR COBALT OR NICKEL OR MANGANESE) AND SOIL (3A)
T. 3
               PH AND (PHYTOREMEDIAT? OR PHYTOEXTRACT? OR HYPERACCUMULAT?)
=> s 13 not PY>1995
   9 FILES SEARCHED...
  10 FILES SEARCHED...
  26 FILES SEARCHED...
'1995' NOT A VALID FIELD CODE
  30 FILES SEARCHED...
'1995' NOT A VALID FIELD CODE
  42 FILES SEARCHED...
             7 L3 NOT PY>1995
=> dup remov
ENTER L# LIST OR (END):12
DUPLICATE IS NOT AVAILABLE IN 'CAOLD, DGENE, DPCI, IMSPATENTS, LITALERT,
PATDPASPC, PCTGEN, PROUSDDR, PS, RDISCLOSURE, SYNTHLINE'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L2
             16 DUP REMOV L2 (4 DUPLICATES REMOVED)
```

=> remov dup 14 DUP IS NOT VALID HERE The DELETE command is used to remove various items stored by the system.

To delete a saved query, saved answer set, saved L-number list, SDI request, batch request, mailing list, or user-defined cluster, format, or search field, enter the name. The name may include? for left, right, or simultaneous left and right truncation.

Examples:

```
DELETE BIO?/Q
                     - delete query names starting with BIO
DELETE ?DRUG/A
                     - delete answer set names ending with DRUG
                    - delete L-number lists containing ELEC
DELETE ?ELEC?/L
DELETE ANTICOAG/S
                    - delete SDI request
DELETE ENZYME/B
                     - delete batch request
DELETE .MYCLUSTER
                      - delete user-defined cluster
DELETE .MYFORMAT
                      - delete user-defined display format
DELETE .MYFIELD
                      - delete user-defined search field
DELETE NAMELIST MYLIST - delete mailing list
```

To delete an ordered document or an offline print, enter its number.

Examples:

```
DELETE P123001C - delete print request
DELETE D134002C - delete document order request
```

To delete an individual L-number or range of L-numbers, enter the L-number or L-number range. You may also enter DELETE LAST followed by a number, n, to delete the last n L-numbers. RENUMBER or NORENUMBER may also be explicitly specified to override the value of SET RENUMBER.

Examples:

```
DELETE L21 - delete a single L-number

DELETE L3-L6 - delete a range of L-numbers

DELETE LAST 4 - delete the last 4 L-numbers

DELETE L33- - delete L33 and any higher L-number

DELETE -L55 - delete L55 and any lower L-number

DELETE L2-L6 RENUMBER - delete a range of L-numbers and renumber remaining L-numbers

DELETE RENUMBER - renumber L-numbers after deletion of intermediate L-numbers
```

Entire sets of saved items, SDI requests, batch requests, user-defined items, or E-numbers can be deleted.

Examples:

```
DELETE SAVED/Q - delete all saved queries

DELETE SAVED/A - delete all saved answer sets

DELETE SAVED/L - delete all saved L-number lists

DELETE SAVED - delete all saved queries, answer sets, and L-number lists

DELETE SAVED/S - delete all SDI requests

DELETE SAVED/B - delete all batch requests

DELETE CLUSTER - delete all user-defined clusters

DELETE FORMAT - delete all user-defined search fields
```

DELETE SELECT - delete all E-numbers DELETE HISTORY - delete all L-numbers and restart the session at L1 To delete an entire multifile SDI request, enter DELETE and the name of the request. To delete a component from the multifile SDI, enter DELETE and the name of the component. => dup remov 14 DUPLICATE IS NOT AVAILABLE IN 'CAOLD, DGENE, DPCI, IMSPATENTS, LITALERT, PATDPASPC, PCTGEN, PROUSDDR, PS, RDISCLOSURE, SYNTHLINE'. ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE PROCESSING COMPLETED FOR L4 L6 6 DUP REMOV L4 (1 DUPLICATE REMOVED) => d his (FILE 'HOME' ENTERED AT 16:06:28 ON 25 SEP 2006) FILE 'CAPLUS, MEDLINE, BIOSIS, AGRICOLA, CABA, CAOLD, CASREACT, CROPU, DGENE, DPCI, ENCOMPPAT, EPFULL, FRANCEPAT, FRFULL, FSTA, GBFULL, IFIPAT, IMSPATENTS, INPADOC, JAPIO, KOREAPAT, LITALERT, NTIS, PAPERCHEM2, PATDD, PATDPA, PATDPAFULL, PATDPASPC, PCTFULL, ... 'ENTERED AT 16:09:37 ON 25 SEP 2006 L1790 S (MN OR MANGANESE) AND SOIL AND (HYPERACCUMULAT? OR PHYTOREMED L220 S L1 NOT PY>1995 L3 163 S (MN OR NI OR CO OR COBALT OR NICKEL OR MANGANESE) AND SOIL (3 7 S L3 NOT PY>1995 T.4 L5 16 DUP REMOV L2 (4 DUPLICATES REMOVED) L6 6 DUP REMOV L4 (1 DUPLICATE REMOVED) => d 16 1-6ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1 L61995:553662 CAPLUS AN 122:273182 DN TΤ Zinc and Cadmium Uptake by Hyperaccumulator Thlaspi caerulescens and Metal Tolerant Silene vulgaris Grown on Sludge-Amended Soils ΑU Brown, Sally L.; Chaney, Rufus L.; Angle, J. Scott; Baker, Alan J. M. CS Department of Agronomy, University of Maryland, College Park, MD, 20742, SO Environmental Science and Technology (1995), 29(6), 1581-5 CODEN: ESTHAG; ISSN: 0013-936X PB American Chemical Society DT Journal LA English L6 ANSWER 2 OF 6 PCTFULL COPYRIGHT 2006 Univentio on STN ΑN 1994029466 PCTFULL ED 20020513 TIEN PHYTOREMEDIATION OF METALS TIFR PHYRODECONTAMINATION DE SOLS CONTAMINES PAR DES METAUX ΤN RASKIN, Ilya; KUMAR, Nanda, P., B., A.; DOUCHENKOV, Slavik PΑ PHYTOTECH, INC. LA English DT Patent PΙ WO 9429466 A1 19941222 DS AT AU BR BY CA CN CZ HU JP PL RU SK UA AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE AΙ WO 1994-US6178 A 19940602 US 1993-8/073,258 PRAI 19930604 US 1994-8/252,234 19940601 ICM C12N015-82

```
ICS
       B09B003:00; A01H005:00
L6
       ANSWER 3 OF 6
                         PCTFULL
                                    COPYRIGHT 2006 Univentio on STN
ΑN
       1994025628 PCTFULL ED 20020513
TIEN
       METHOD FOR ACCELERATED BIOREMEDIATION AND METHOD OF USING AN APPARATUS
       THEREFOR
TIFR
       PROCEDE DE BIORESTAURATION ACCELEREE ET D'UTILISATION D'UN APPAREIL
       PREVU A CET EFFET
       GLAZE, Bradley, S.;
IN
       WARNER, Kenneth, R.;
       HORN, Terry, Dean;
       HORN, Ronald, Dean
PΑ
       GLAZE, Bradley, S.;
       WARNER, Kenneth, R.;
       HORN, Terry, Dean;
       HORN, Ronald, Dean
LA
       English
DT
       Patent
       WO 9425628
PΙ
                            A1 19941110
DS
       W:
                     AT AU BB BG BR BY CA CH CN CZ DE DK ES FI GB HU JP KP KR
                     KZ LK LU LV MG MN MW NL NO NZ PL PT RO RU SD SE SK UA UZ
                     VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ
                     CF CG CI CM GA GN ML MR NE SN TD TG
AΙ
       WO 1994-US3829
                            A 19940406
       US 1993-8/043,666
PRAI
                               19930406
       US 1994-not furnished
                               19940405
ICM
       C12S013-00
ICS
       A62D003:00; C22B061:00
L6
       ANSWER 4 OF 6
                         PCTFULL
                                    COPYRIGHT 2006 Univentio on STN
AN
       1994001367 PCTFULL ED 20020513
TIEN
       A METHOD OF OBTAINING LEAD AND ORGANOLEAD FROM CONTAMINATED MEDIA USING
       METAL ACCUMULATING PLANTS
TIFR
       PROCEDE D'EXTRACTION DE PLOMB ET DE PLOMB ORGANIQUE DE MILIEUX
       CONTAMINES A L'AIDE DE PLANTES EMMAGASINANT LES METAUX
IN
       CUNNINGHAM, Scott, Daniel
PΑ
       E.I. DU PONT DE NEMOURS AND COMPANY
LA
       English
DΤ
       Patent
       WO 9401367
PΙ
                            A1 19940120
DS
                     CA JP AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
ΑI
       WO 1993-US5996
                            A 19930628
       US 1992-7/908,279
PRAI
                               19920702
ICM
       C02F003-32
ICS
       C22B013:00
L6
     ANSWER 5 OF 6 USPATFULL on STN
ΑN
       94:99509 USPATFULL
TΙ
       Phytoremediation of metals
       Raskin, Ilya, Manalapan, NJ, United States
IN
       Kumar, Nanda P. B. A., New Brunswick, NJ, United States
       Douchenkov, Slavik, East Brunswick, NJ, United States
PA
       PhytoTech, Inc., Morristown, NJ, United States (U.S. corporation)
PΤ
       US 5364451
                               19941115
       US 1993-73258
ΑI
                               19930604 (8)
DT
       Utility
FS
       Granted
LN.CNT 671
INCL
       INCLM: 075/710.000
       INCLS: 071/009.000; 210/602.000; 210/682.000; 210/688.000
NCL
       NCLM:
              075/710.000
              071/009.000; 210/602.000; 210/682.000; 210/688.000
       NCLS:
IC
       [5]
       ICM
              C21B009-00
```

```
ICS
              C22B009-00
              C21B0009-00 [ICM,5]; C22B0009-00 [ICS,5]
       IPCI
              B09C0001-10 [I,A]; B09C0001-10 [I,C*]; C12N0015-82 [I,A];
       IPCR
              C12N0015-82 [I,C*]
       075/710; 210/602; 210/682; 210/688; 071/9
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
1.6
     ANSWER 6 OF 6 USPATFULL on STN
       94:51052 USPATFULL
ΑN
       Method of obtaining lead and organolead from contaminated media using
TΤ
       metal accumulating plants
IN
       Cunningham, Scott D., Chaddsford, PA, United States
       E. I. Du Pont de Nemours and Company, Wilmington, DE, United States
PΑ
       (U.S. corporation)
       US 5320663
PΤ
                               19940614
       US 1992-908279
ΑI
                               19920702 (7)
DT
       Utility
FS
       Granted
LN.CNT 763
INCL
       INCLM: 075/432.000
       INCLS: 210/602.000; 435/262.000; 435/267.000; 588/231.000
NCL
       NCLM:
              075/432.000
       NCLS:
              210/602.000; 435/262.000; 435/267.000
IC
       [5]
       ICM
              C12S001-00
              C07G017-00; A62D003-00; C02F003-32
       ICS
       IPCI
              C12S0001-00 [ICM,5]; C07G0017-00 [ICS,5]; A62D0003-00 [ICS,5];
              C02F0003-32 [ICS,5]
              C02F0003-32 [I,A]; C02F0003-32 [I,C*]; C22B0003-00 [I,C*];
       IPCR
              C22B0003-18 [I,A]; C22B0013-00 [I,A]; C22B0013-00 [I,C*]
       435/262; 435/267; 210/602; 588/231; 405/129; 075/432; 424/195.1
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> d 16 6 kwic
L6
    ANSWER 6 OF 6 USPATFULL on STN
SUMM
       \cdot . \cdot known to be toxic to most wildlife and man in relatively low
       concentrations. Elements such as lead, platinum, mercury, cadmium,
       cobalt, zinc, tin, arsenic, and chromium are used in many
       industrial applications and often significant levels of these metals are
       found. . . metals are also found in organic form such as
       organoarsenic and organotin, used as pesticides or herbicides, as well
       as nickel tetracarbonyl and tetraethyllead produced as
      by-products of the petroleum industry.
SUMM
         . . plant's response to a metalliferous environment ranges from
       active exclusion of the metallic species to tolerance to accumulation
       and even hyperaccumulation where concentrations may approach
       greater than 1% of plant dry matter. The phenomenon of accumulation and
       hyperaccumulation of metals by plants has been demonstrated over
       a wide range of plant families and to date it has not been possible to
       predict which plants of which families will function as metal
       accumulators and/or hyperaccumulators. Further complicating
       the issue is the fact that plants that might be classified as
       hyperaccumulators of one metal species may be barely tolerant of
       another. Hence the phenomenon is specific not only for plant type.
       Plants: Evolutionary Aspects" A. J. Shaw (ed.) CRC Press (1989)) For
       example various species of Alyssum are known to be
      hyperaccumulators of nickle reaching levels of 13400 ugNi/g but
       do not appear to be hyperaccumulators of other metals. Thlaspi
       sp. on the other hand demonstrate hyperaccumulation of a
       variety of metals including nickle, zinc, and lead. To date the plant
       that has shown the greatest ability. . . Metal Tolerance in Plants:
```

Evolutionary Aspects", A. J. Shaw (ed.) CRC Press (1989)) A summary of

```
many of the known hyperaccumulators is included in Baker et.
       al., Terrestrial high plants which hyperaccumulate metallic
       elements--a review of their distribution, ecology and phytochemistry,
       Biorecovery, 1, 81, (1989) herein incorporated by reference.
SUMM
       The work surrounding the studies of accumulation and
      hyperaccumulation of metals by plants has been focused in the
       areas of using these plants as indicators of metal contamination and.
         constituents In: "Land Treatment of Hazardous Wastes", Parr et al.
       (ed.) Noyes Data Corporation New Jersey (1983). Chaney notes that
       hyperaccumulators of nickle, and copper are known to accumulate
       these metals to as much as 1% of dry plant weight and. .
SUMM
       . . (Ambrosia artemisiifolia) and smartweed (Polygonum
      pennsylvanicum) isolated from a municipal landfill for concentrations of
       various heavy metals including Mh, Cu, Co, Cr, and Pb. The
      highest concentration of Pb that was recorded for either plant was 3.68
      ppm dry weight of the plant. Mense does not teach accumulation or
       hyperaccumulation of lead by ragweed or dogbane.
      The term "hyperaccumulator" refers to any plant that is
SUMM
       capable of accumulating a metal species to levels equal to or greater
       than 10,000.
            . rate of the plants and the bio-availability of lead in the
SUMM
       soil. In the case of lead remediation the preferred pH of the
       soil is in a range of pH5-pH8. Phosphate is a requirement for
       ragweed or dogbane growth and soil is amended to. .
DETD
                                                  (conc) mM
                                            nutr.
                                                in uM
     0.32
        KH.sub.2 PO.sub.4
                     136.09 1
                                      0.010 Fe
                                                10.0
2
        KNO.sub.3
                     101.1 1
                                 K
                                      1.5
                                            Mn
                                                1.0
3
     493.0
        MgSO.sub.4.7H.sub.2 O
                     246.5 1
                                      2.0
                                 Ca
                                            В
                                                1.0
4
        Ca(NO.sub.3).sub.2.4H.sub.2 O
                     236.16 2
                                      1.0
                                 Ma
                                            Cu 0.2
5
     5.6. . . 18.6
        Na.sub.2 EDTA.2H.sub.2 O
                     372.24
    74.6
        KCl
                     74.55 1
                                 N
                                      5.0
                                               0.2
                                            Mo
7
     0.124
        H.sub.3 BO.sub.3
                     61.84 1
                                 C1.
                                      0.5
                                                0.13
                                            Ni
1-7 in all
        MnSO.sub.4.H.sub.2 O
                     169.01
                                            Co 0.13
nutrient
        ZnSO.sub.4.7H.sub. O
                     287.54
                                            EDTA
                                                25.0
solutions
    0.100
        CuSO.sub.4.5H.sub.2 O
                     249.75
                                            Pb 4.8
    0.576
        MoO.sub.3
                    143.94
    0.060
```

CoCl.sub.2.6H.sub.2 O

```
DETD
         . . nutrient medium defined in Table I. An identical set of
       seedlings were transplanted in METROMIX potting soil (Grace/Sierra
       Horticultural Products Co. Milpitas, Calif.) containing no
       lead as indicators of normal plant growth. All plants were grown for 30
       days in a.
=> d 16 1-5
L6
     ANSWER 1 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
     1995:553662 CAPLUS
ΑN
     122:273182
DN
TI
     Zinc and Cadmium Uptake by Hyperaccumulator Thlaspi caerulescens
     and Metal Tolerant Silene vulgaris Grown on Sludge-Amended Soils
ΑU
     Brown, Sally L.; Chaney, Rufus L.; Angle, J. Scott; Baker, Alan J. M.
CS
     Department of Agronomy, University of Maryland, College Park, MD, 20742,
SO
     Environmental Science and Technology (1995), 29(6), 1581-5
     CODEN: ESTHAG; ISSN: 0013-936X
PΒ
     American Chemical Society
DT
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LA
     English
L6
       ANSWER 2 OF 6
                         PCTFULL
                                    COPYRIGHT 2006 Univentio on STN
ΑN
       1994029466 PCTFULL ED 20020513
TIEN
       PHYTOREMEDIATION OF METALS
TIFR
       PHYRODECONTAMINATION DE SOLS CONTAMINES PAR DES METAUX
ΙN
       RASKIN, Ilya;
       KUMAR, Nanda, P., B., A.;
       DOUCHENKOV, Slavik
PA
       PHYTOTECH, INC.
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                            A1 19941222
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ICM
       C12N015-82
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       B09B003:00; A01H005:00
L6
       ANSWER 3 OF 6
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ΑN
       1994025628 PCTFULL ED 20020513
TIEN
       METHOD FOR ACCELERATED BIOREMEDIATION AND METHOD OF USING AN APPARATUS
       THEREFOR
       PROCEDE DE BIORESTAURATION ACCELEREE ET D'UTILISATION D'UN APPAREIL
TIFR
       PREVU A CET EFFET
IN
       GLAZE, Bradley, S.;
       WARNER, Kenneth, R.;
       HORN, Terry, Dean;
HORN, Ronald, Dean
PΑ
       GLAZE, Bradley, S.;
       WARNER, Kenneth, R.;
       HORN, Terry, Dean;
HORN, Ronald, Dean
LA
       English
DT
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PRAI
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ICM
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       A62D003:00; C22B061:00
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       ANSWER 4 OF 6
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       1994001367 PCTFULL ED 20020513
TIEN
       A METHOD OF OBTAINING LEAD AND ORGANOLEAD FROM CONTAMINATED MEDIA USING
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TIFR
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       CONTAMINES A L'AIDE DE PLANTES EMMAGASINANT LES METAUX
IN
       CUNNINGHAM, Scott, Daniel
PΑ
       E.I. DU PONT DE NEMOURS AND COMPANY
LA
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PΙ
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       C02F003-32
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       94:99509 USPATFULL
TΙ
       Phytoremediation of metals
ΙN
       Raskin, Ilya, Manalapan, NJ, United States
       Kumar, Nanda P. B. A., New Brunswick, NJ, United States
       Douchenkov, Slavik, East Brunswick, NJ, United States
PA
       PhytoTech, Inc., Morristown, NJ, United States (U.S. corporation)
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       Utility
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       Granted
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       INCLM: 075/710.000
       INCLS: 071/009.000; 210/602.000; 210/682.000; 210/688.000
NCL
             075/710.000
       NCLS: 071/009.000; 210/602.000; 210/682.000; 210/688.000
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       ICS
              C22B009-00
       IPCI
              C21B0009-00 [ICM, 5]; C22B0009-00 [ICS, 5]
              B09C0001-10 [I,A]; B09C0001-10 [I,C*]; C12N0015-82 [I,A];
       IPCR
              C12N0015-82 [I,C*]
       075/710; 210/602; 210/682; 210/688; 071/9
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
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